IN THE CLAIMS

Please amend the claims as shown below.

1. (Canceled)

2. (Currently Amended) The ~~modified~~ thermostable DNA polymerase according to claim 42, wherein in the DIETLYH (SEQ ID NO:35) or DIETFYH (SEQ ID NO:36) sequence, histidine (H) has been replaced by an amino acid selected from the group consisting of aspartic acid, glutamic acid, tyrosine, alanine, lysine and arginine.

3. (Currently Amended) The ~~modified~~ thermostable DNA polymerase according to claim 42 having the following physicochemical properties:

(1) DNA extension rate: at least 20 bases/second; and

(2) thermostability: it is capable of retaining 10% or more DNA polymerase activity of untreated DNA polymerase at pH 8.8 (determined at 25°C) after treatment at 95°C for 6 hours.

4. (Currently Amended) A ~~modified~~ thermostable DNA polymerase having a 3'-5' exonuclease activity and the following physicochemical properties:

(1) DNA extension rate: at least 30 bases/second;

(2) thermostability: the modified thermostable DNA polymerase being capable of retaining 40% or more DNA polymerase activity of untreated DNA polymerase at pH 8.8 (determined at 25°C) after treatment at 95°C for 6 hours; and

(3) amino acid sequence: the ~~modified~~ thermostable DNA polymerase comprising an amino acid sequence of SEQ ID NO:2 ~~except that~~ wherein the amino acid sequence located at the 141- to 146-positions of SEQ ID NO:2 is DIETLY (SEQ ID NO:37), except that ~~and~~ histidine (H) at the 147-position of SEQ ID NO:2 has been replaced by another amino acid.

5. (Currently Amended) The ~~modified~~ thermostable DNA polymerase according to claim 4 having the following thermostability: it is capable of retaining 60% or more DNA polymerase activity of untreated DNA polymerase at pH 8.8 (determined at 25°C) after treatment at 95°C for 6 hours.

6. (Currently Amended) The ~~modified~~ thermostable DNA polymerase according to claim 5, wherein histidine (H) at the 147-position has been replaced by an amino acid selected from the group consisting of aspartic acid, glutamic acid, tyrosine, alanine, lysine and arginine.

7. (Currently Amended) The ~~modified~~ thermostable DNA polymerase according to claim 6, wherein histidine (H) at the 147-position has been replaced by aspartic acid.

8. (Currently Amended) The ~~modified~~ thermostable DNA polymerase according to claim 6, wherein histidine (H) at the 147-position has been replaced by glutamic acid.

9. (Currently Amended) The ~~modified~~ thermostable DNA polymerase according to claim 6, wherein histidine (H) at the 147-position has been replaced by tyrosine.

10. (Currently Amended) The ~~modified~~ thermostable DNA polymerase according to claim 6, wherein histidine (H) at the 147-position has been replaced by alanine.

11. (Currently Amended) The ~~modified~~ thermostable DNA polymerase according to claim 6, wherein histidine (H) at the 147-position has been replaced by lysine.

12. (Currently Amended) The ~~modified~~ thermostable DNA polymerase according to claim 6, wherein histidine (H) at the 147-position has been replaced by arginine.

13-24. (Canceled)

25. (Previously Presented) A reagent kit for amplifying nucleic acid, which comprises 2 kinds of primers, each of the primers being complementary to a DNA extension product of the other primer; dNTP; the thermostable DNA polymerase of claim 42; divalent ion(s); monovalent ion(s); and a buffer solution.

26. (Previously Presented) A reagent kit for amplifying nucleic acid, which comprises 2 kinds of primers, each of the primers being complementary to a DNA extension product of the other primer; dNTP; the thermostable DNA polymerase of claim 42; magnesium ion; at least one of monovalent ions selected from the group consisting of ammonium ion and potassium ion; BSA (bovine serum albumin); a nonionic surfactant and a buffer solution.

27. (Previously Presented) A reagent kit for amplifying nucleic acid, which comprises 2 kinds of primers, each of the primers being complementary to a DNA extension product of the other primer; dNTP; the thermostable DNA polymerase of claim 42; magnesium ion; at least one of monovalent ions selected from the group consisting of ammonium ion and potassium ion;

BSA (bovine serum albumin); a nonionic surfactant; a buffer solution and an antibody capable of suppressing at least one activity selected from polymerase activity and 3'-5' exonuclease activity of the thermostable DNA polymerase.

28. (Currently Amended) A DNA polymerase composition which comprises at least one ~~or more kinds~~ of the ~~modified~~ thermostable DNA polymerase of claim 42.

29. (Canceled)

30. (Previously Presented) A reagent kit for producing a mutated DNA which comprises mutagenesis primers, dNTP and the thermostable DNA polymerase of claim 42.

31. (Canceled)

32. (Currently Amended) A ~~modified~~ thermostable DNA polymerase according to claim 42, wherein said DNA polymerase is an α-like DNA polymerase.

33-35. (Canceled)

36. (Currently Amended) A ~~modified~~ thermostable DNA polymerase according to claim 42, wherein the histidine (H) has been replaced by an acidic amino acid to obtain the ~~modified~~ thermostable DNA polymerase with the modification having significantly reduced 3'-5' exonuclease activity as compared with the ~~enzyme~~ thermostable DNA polymerase without the ~~before~~ modification.

37. (Currently Amended) A ~~modified~~ thermostable DNA polymerase according to claim 42, wherein the histidine (H) has been replaced by a neutral amino acid to obtain ~~a modified~~ the thermostable DNA polymerase with the modification having improved amplifying efficiency compared with the thermostable DNA polymerase without the modification.

38. (Currently Amended) A ~~modified~~ thermostable DNA polymerase according to claim 42, wherein the histidine (H) has been replaced by a basic amino acid to obtain ~~a modified~~ the thermostable DNA polymerase with the modification having significantly improved 3'-5' exonuclease activity and/or fidelity on ~~a~~ DNA replication or amplification compared with the thermostable DNA polymerase without the modification.

39. (Currently Amended) The ~~modified~~ thermostable DNA polymerase according to claim 42, wherein the histidine (H) has been replaced by an acidic amino acid to obtain the ~~modified~~ thermostable DNA polymerase with the modification having improved PCR amplifcation efficiency from low copy number of template DNA compared with the thermostable DNA polymerase without the modification.

40. (Currently Amended) The ~~modified~~ thermostable DNA polymerase according to claim 42, wherein the histidine (H) has been replaced by an acidic amino acid to obtain the ~~modified~~ thermostable DNA polymerase with the modification having improved PCR amplifcation efficiency from a long DNA segment compared with the thermostable DNA polymerase without the modification.

41. (Currently Amended) The ~~modified~~ thermostable DNA polymerase according to claim 42, wherein the histidine (H) has been replaced by a neutral amino acid to obtain the ~~modified~~ thermostable DNA polymerase with the modification having improved PCR amplifcation efficiency from low copy number of template DNA compared with the thermostable DNA polymerase without the modification.

42. (Currently Amended) A ~~modified~~ thermostable DNA polymerase having a 3'-5' exonuclease activity and the amino acid sequence the same as the amino acid sequence of a thermostable DNA polymerase having a 3'-5' exonuclease activity of *Pyrococcus furiosus*, *Pyrococcus kodakaraensis* KOD1 or *Thermococcus litoralis* with a single modification, wherein the modification is ~~the~~ a replacement of histidine (H) ~~by another amino acid~~ in the DIETLYH (SEQ ID NO:35) or DIETFYH (SEQ ID NO:36) sequence (D: aspartic acid, I: isoleucine, E: glutamic acid, T: threonine, L: leucine, F: phenylalanine, Y: tyrosine, H: histidine) within the exonuclease I region by another amino acid ~~of the thermostable DNA polymerase, the origin of the thermostable DNA polymerase being modified is *Pyrococcus furiosus*, *Pyrococcus kodakaraensis* KOD1 or *Thermococcus litoralis*~~.

43. (Currently Amended) A modified thermostable DNA polymerase having a 3'-5' exonuclease activity and the amino acid sequence the same as the amino acid sequence of a thermostable DNA polymerase having a 3'-5' exonuclease activity of *Pyrococcus kodakaraensis*

KOD1 with a single modification, wherein the modification is ~~the~~ a replacement of histidine (H) ~~by another amino acid~~ in the DIETLYH sequence ~~represented by~~ (SEQ ID NO:35) in SEQ ID NO:2 (D: aspartic acid, I: isoleucine, E: glutamic acid, T: threonine, L: leucine, F: phenylalanine, Y: tyrosine, H: histidine) within the exonuclease I region by another amino acid ~~of a thermostable DNA polymerase, the origin of the thermostable DNA polymerase being modified is *Pyrococcus kodakaraensis* KOD1~~.